

REMARKS

Claims 1-16 are pending in this Application, and are subject to a final rejection. Herein, Applicants traverse the rejection and amend claim 2. No new matter has been added thereby. Claim 15 is cancelled herein. Applicants request that this Amendment be entered, the rejection reconsidered, and that the Application be passed to issue.

Claim Rejections

In the Office Action, Claims 1-16 were rejected under 35 U.S.C. §103 as being unpatentable over Vialen et al. (U.S. Patent No. 6,826,406) in view of Funnell et al. (U.S. Pat. Pub. No. 2005/0086466). Applicants respectfully traverse. As acknowledged in the Office Action with respect to each of the independent claims 1, 4-5, and 14-16, Vialen does not teach either the operation of determining whether a Ciphering Activation Time for DPCH information element identifying a ciphering activation time is present, or apparatus configured to make such a determination. As described more fully below, Funnell does not teach or suggest the limitations missing from Vialen.

Initially, it is pointed out that the present invention is directed to an apparatus and method to enable a user equipment (UE) device operating in a UMTS to exhibit logical behavior in response to a Radio Bearer Setup message, a Radio Bearer Reconfiguration message, a Radio Bearer Release message, a Transport Channel Reconfiguration message, a Physical Channel Reconfiguration message, a Cell Update Confirm message, a URA Update Confirm message, or a UTRAN Mobility Information message, which includes a Ciphering Mode Info information element (*see* paragraphs [0007] through [0009]). To enable logical behavior in the UE, according to the present invention, a mechanism must be specified for ensuring that the Ciphering Mode Activation Time for DPCH information element is available. Vialen does not discuss this at all, and Funnell is focused on a different problem. The two references, taken alone or in combination, do not teach or suggest the present invention.

With respect to claim 1, as acknowledged in the Office Action, Vialen does not teach the operation of determining whether a Ciphering Activation Time for DPCH information element is present in a message, in the case of Vialen a radio bearer reconfiguration message. It must

follow, however, that if this determination is not made, Vialen would not (and, Applicants believe, does not) teach returning a message indicating the absence of the information element. In the relevant portion of Vialen, col. 9, line 30 to col. 10, line 34, cited in the Office Action, there is a discussion of sending a reconfiguration request message BEARER_RECONF_REQ, attempting reconfiguration, and sending a reply notification of whether the attempt was successful. These reply messages are generally limited to BEARER_COMPL if reconfiguration succeeds and BEARER_FAIL if it does not. A CAUSE may be sent in the BEARER_FAIL message, but since Vialen does not appear to discuss at all the operations of determining whether the BEARER_RECONF_REQ includes an element that identifies a ciphering activation time, the CAUSE indicator would not include a message indicating the absence of the information element.

Since claim 1 is directed to a method of processing a message received at a UE, the issue is not whether it is desirable to include a Ciphering Activation Time for DPCH information element that identifies a ciphering activation time. Claim 1, rather, recites determining whether such an element is present in, for example, a Radio Bearer Reconfiguration message, and returning an indicative message if it is not. This method is not taught or suggested in Vialen, which is simply silent on the issue. Nor is it taught or suggested in Funnell. Funnell is not silent, but is primarily concerned with specifying an uplink ciphering activation time. (See, Funnell, paragraphs [0009] to [0011] and [0029] to [0034].) Funnell also refers to the UTRAN starting or changing the ciphering configuration by sending ciphering mode information in one of a number of RCC messages, including, for example, a RadioBearerReconfiguration message (paragraph [0025]). Funnell adds that the ciphering configuration is applied to all radio bearers in the domain affected by the UTRAN message (paragraph [0025]). Perhaps for this reason Funnell does not, however, appear to teach or suggest the method of claim 1, that is, the operations of determining whether a Ciphering Activation Time for DPCH information element identifying a ciphering activation time is actually present in a UTRAN message, and returning a message indicating the absence of the information if it is not.

Applicants respectfully suggest, therefore, that it would not be obvious to an ordinarily-skilled artisan to arrive at the method of claim 1 in light of Vialen or Funnell, or to both of them

in combination, without the teaching of the present Application. For this reason, Applicants believe that this ground for rejection has been overcome with respect to claim 1, as well as to claims 2 and 3 that depend from it.

With respect to claim 5, as acknowledged in the Office Action, Vialen does not teach the operation of determining whether a Ciphering Activation Time for DPCH information element is present in a message, in the case of Vialen a radio bearer reconfiguration message. It must follow, however, that if this determination is not made, Vialen would not (and, Applicants believe, does not) teach selecting an activation time for applying ciphering changes for the radio bearers in response to this determination. In the relevant portion of Vialen, col. 9, line 30 to col. 10, line 34, cited in the Office Action, there is a discussion of sending a reconfiguration request message BEARER_RECONF_REQ, attempting reconfiguration, and sending a notification of whether the attempt was successful. It does not appear to discuss at all the operations of determining whether the BEARER_RECONF_REQ includes an element that identifies a ciphering activation time, or selecting a ciphering activation time in the event that such an element is not present in the message.

Remembering that claim 5 is directed to a method of processing a message received at a UE, the issue again is not whether it is desirable to include a Ciphering Activation Time for DPCH information element that identifies a ciphering activation time. Claim 5, rather, recites determining whether such an element is present in, for example, a Radio Bearer Reconfiguration message, and selecting one if it is not. This method is not taught or suggested in Vialen, which is simply silent on the issue. Nor is it taught or suggested in Funnell. Funnell is not silent, but is primarily concerned with specifying an uplink ciphering activation time. (*See*, Funnell, paragraphs [0009] to [0011] and [0029] to [0034].) Funnell also refers to the UTRAN starting or changing the ciphering configuration by sending ciphering mode information in one of a number of RCC messages, including, for example, a RadioBearerReconfiguration message (paragraph [0025]). Funnell adds that the ciphering configuration is applied to all radio bearers in the domain affected by the UTRAN message (paragraph [0025]). Funnell does not, however, appear to teach or suggest the method of claim 5, that is, the operations of determining whether a Ciphering Activation Time for DPCH information element identifying a ciphering activation

time is actually present in a UTRAN message, and selecting an activation time in the event that it is not.

Applicants respectfully suggest, therefore, that it would not be obvious to an ordinarily-skilled artisan to arrive at the method of claim 5 in light of Vialen or Funnel, or to both of them in combination, without the teaching of the present Application. For this reason, Applicants believe that this ground for rejection has been overcome with respect to claim 5, as well as to claims 6-13 that directly or indirectly depend from it.

Similarly, with regard to claims 14 and 16, it follows from the remarks above that neither Vialen nor Funnel, nor the two of them in combination teach or suggest a control module for determining whether a Ciphering Activation Time for DPCH information element is present in the message when radio bearers exist using radio link control transparent mode. Except for the teachings of the present Application, Applicants respectfully suggest that it would not be obvious to an ordinarily-skilled artisan to arrive at the UE of claim 14 or claim 16 even in light of the cited references. For this reason, Applicants believe that this ground for rejection has been overcome with respect to claims 14 and 16.

Accordingly, in light of the foregoing, independent claims 1, 4, 5, 14, and 16, and the dependent claims dependent thereon, are believed to be conditioned for allowance. Entry of this Amendment, further examination and reconsideration for allowance is therefore respectfully requested. Such early action is earnestly solicited.

Respectfully submitted,

/Robert H. Kelly/

Robert H. Kelly
Registration No. 33,922

SCHEEF & STONE, L.L.P.
5956 Sherry Lane, Suite 1400
Dallas, Texas 75225
Telephone: (214) 706-4201
Fax: (214) 706-4242
robert.kelly@scheefandstone.com